

O'Brien 12

IN THE CLAIMS:

1. - 10. *cancelled*

11. (*currently amended*) A method of producing a stepped etalon having transition regions between steps that are not parallel to an opposing side comprising the steps of:

providing an etalon body which is transparent at least in a first range of wavelengths and having first and second opposing sides, said first side having a plurality of steps, adjacent steps separated by a generally abrupt transition region; and

further processing the etalon body first side to make the each transition region ~~regions~~ on said first side non-perpendicular non-parallel to the opposing first ~~second~~ side to reduce diffraction of light in each transition region and reduce the dead spot behind each transition region.

12. (*original*) The method of claim 11 wherein the step of further processing comprises the step of chemically etching the first side of the etalon.

13. - 17. *cancelled*

18. (*currently amended*) A method of producing a stepped etalon as defined in claim 11 wherein the step of further processing comprises the step of having transition regions between steps that are not parallel to an opposing side comprising the steps of:

providing an etalon body that is transparent at least in a first range of wavelengths and having first and second opposing sides; and

etching said first side in the abrupt transition regions at an angle of less than 90° to produce said transition regions non-perpendicular step transitions.

19. (*new*) The method of claim 11 wherein the step of further processing comprises the steps of:

depositing a masking material over a first portion of said first side while leaving a second portion of said first side exposed;

O'Brien 12

applying a directional abrasive etching beam to said first side at an angle less than ninety degrees relative to said first side for a predetermined amount of time; and removing said masking material.